AMENDMENT OF SOLICITATIO	N/MODIFICATIO	N OF CONTRACT			ACT ID CODE J	PAGE	OF PAGES
2. AMENDMENT/MODIFICATION NO. 0004	3. EFFECTIVE DATE 16 DEC 03	4. REQUISITION/PURCH	ASE	REQ. NO.	5. PROJEC	T NO.(If ap	plicable)
6. ISSUED BY CODI Contracting Officer (Code 182) Naval Undersea Warfare Center Division Ke 610 Dowell Street, Keyport, WA 98345-761 PH: 360-315-2215, FAX 360-396-7036 E-MAIL: klosem@kpt.nuwc.navy.mil	E N00253 eyport 10	7. ADMINISTERED BY (If oth SEE BLOCK 6	er th	an item 6)	CODE		
8. NAME AND ADDRESS OF CONTRACTOR (No.,	Street, County, State and Zi	p Code)	x x	9B. DATED (29 O	MENT OF SOLIO 0253-03-Q-(SEE ITEM 11) CT 03 DF CONTRACT/ (SEE ITEM 13)	O310 ORDER NO.	0.
CODE	FACILITY CODE						
		AMENDMENTS OF SOLICITATI	ION	S			
Offers must acknowledge receipt of this amendment prior to (a) By completing Items 8 and 15, and returning cop which includes a reference to the solicitation and amendmen RECEIPT OF OFFERS PRIOR TO THE HOUR AND DA' an offer already submitted, such change may be made by te opening hour and date specified.	ies of the document; (b) By ackn nt numbers. FAILURE OF YOU TE SPECIFIED MAY RESULT legram or letter, provided each to	owledging receipt of this amendment or JR ACKNOWLEDGMENT TO BE RE IN THE REJECTION OF YOUR OFFI	n eacl CEIV ER. 1	h copy of the o /ED AT THE I If by virture of	ffer or (c) By sep PLACE DESIGN this amendment	ATED FOR T you desire to o	HE:hange
12. ACCOUNTING AND APPROPRIATION DATA (
13. THIS ITEM APPLIES ONLY TO MODIFICATION	ONS OF CONTRACTS/ORI	DERS. IT MODIFIES THE CONT	TRA	CT/ORDER	NO. AS DESC	RIBED IN I	TEM 14.
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO:	(Specify authority) THE CHANG	GES SET FORTH IN ITEM 14 ARE M	IADE	IN THE CON	TRACT ORDER	NO. IN ITEM	И 10А.
B.THE ABOVE NUMBERED CONTRACT/ORDER IS M SET FORTH IN ITEM 14, PURSUANT TO THE AUTHOR	RITY OF FAR 43.103(B).		as ch	anges in payin	g office, appropri	ation date, etc	.)
C.THIS SUPPLEMENTAL AGREEMENT IS ENT		O AUTHORITY OF:					
D.OTHER (Specify type of modification and author	ity)						
E. IMPORTANT: Contractor is not, X is required to sign this document and return 1 copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICAT THE PURPOSE OF THIS AME THIS REQUIREMENT AND T PAGE(S).	ENDMENT IS TO PI O INCORPORATE	ROVIDE QUESTIONS A CHANGES AS OUTLIN	NI IEL				
THE CLOSING DATE REMAINS 18 DEC 03, 3:00 PM (PACIFIC TIME). Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)		6A. NAME AND TITLE OF CON MONIQUE A. KLOSE / CONTRA				r print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED 1	6B. UNITED STATES OF AMER	ICA			16C. DATE	SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Off	icer)	الله	····	16 DEC	دمح

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- The purpose of this amendment is to clarify/revise/add the following:
 - Provide answers to various questions received.
 - Provide a replacement for "Supplies or Services and Price/Costs" to add CLINs 0003, 0004, and 0005. Incorporate revisions to NAVSEA Dwg IX 536-866-7543693B. b.

- Add CLINs 0003 through 0005 to paragraph a. "Exercise of Option (Increased Quantities)". d.
- Revise the Time of Delivery and add CLINs 0003, 0004 and 0005 to the Time of Delivery Clause. e.
- Provide a replacement Attachment 2.
- Update Drawing Reference 2.
- The closing date and time of the solicitation remains 18 Dec 03, 3:00 PM. 2.
- All other terms and conditions remain unchanged.

Ouestion 1:	Is it possible to visit the shipyard and see the barge prior to the close date of this RFQ?

Yes, the barge is currently at Fairhaven Shipyard in Bellingham, WA and arrangements to see it can be made. Answer 1::

E-mail request to klosem@kpt.nuwc.navy.mil.

Is the barge going to be in the Shipyard in Washington State or the Detachment Yard in Boston, MA? Question 2:

Answer 2: The barge will be located in Washington State.

Is the 3 ton auxiliary hoist located on a separate trolley or is it located on a common trolley with the main Question 3

hoist?

Yes, the auxiliary hoist shall be on the same trolley as the main hoist. Answer 3:

Ouestion 4: Confirm that both cranes travel on the same runway system (2 bridge cranes, 1 support structure).

The crane shall consist of a single runway system on a single support structure. There shall be two matching Answer 4:

bridge assemblies, each bridge shall have a single trolley, and each trolley shall support a main hoist and an

auxiliary hoist.

For the mechanical storm locks required on the crane endtrucks, are these required to be electro-mechanical **Ouestion 5:**

operated from a control station, or is a manual pin lock assembly allowed which would require a person to

manually insert a locking pin into a chamber?

A manual lock is all that is required. Answer 5:

The runway support structure will be welded to deck insert plates on the barge surface. Confirm that the Question 6:

government will provide the deck insert plates and they will be aligned to CMAA tolerances prior to

installation of the runway.

The deck insert plate is provided by our drawing (the government). However, the government will require Answer 6:

the contractor's final support structure design to provide adequate insert plate size. The drawing which installs the deck insert plates does have a reservation note pending on crane manufacturer's design. As such, the contractor's engineering package will need to be forwarded so that the government drawings would be

updated.

Has there been any consideration given to adjustment of the columns (such as adjustment nuts, etc. at the Question 7:

ground connection between the barge and the runway support columns)?

The requirement is for fixed columns, with adjustability and alignment designed into the runway mounting Answer 7:

system.

Please confirm that storm conditions for survival of the equipment is 45 degrees roll and 15 degrees pitch. Question 8:

Please confirm that this is for no-load conditions.

Survival of equipment is under a no-load condition. It is not anticipated that the crane will be in operating Answer 8:

mode during storm conditions.

Confirm the maximum pitch and roll conditions during operation of the bridge cranes (maximum pitch and Question 9:

roll conditions while the crane is lifting a load).

The crane should be able to lift and move the load at 3 degree roll and 1 degree pitch (Working condition) Answer 9:

and hold the load at 5 degrees pitch and 10 degree roll, not necessary move (Safety condition).

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Reference Remark (#19) NAVSEA DWG IX 536-855-7543693B / Page 5 of 8: The support structure will **Question 10:**

be designed with columns and cross tie beams in the shape of a building with no side, roof, or end walls. At some point in the future the NAVY will add the roof, siding, and end walls and use the support structure to form a deckhouse approx. 80' long x 50' wide. Confirm the understanding of the additional design conditions required for the roof support structure: a) 15' W x 30' L deckhouse roof hatch will be required in the future and is estimated to weigh 15,000 lbs.; b) (2) 500kW diesel generators will be placed on the roof of the deckhouse at a total weight of 30,000 lbs.; c) Dead load of the roof structure (roof sheeting, etc.) to be taken as 20 psf. The total distributed load of 107.5 psf to be added to the cross tie-beam design required for

the bridge cranes.

Yes. The dead load of the structure (20 psf) shall be taken as minimum anticipated loading. The supporting Answer 10:

columns also have additional design condition listed in the specification.

Is a bid bond or performance bond required for this contract? Question 11: Answer 11: A bid or performance bond is not required for this contract.

Regarding the pricing for Item/CLIN 0002, should this price be a day rate or a firm price based on two **Question 12:**

weeks assistance?

Answer 12: A day rate is recommended. However, offeror's commercial sector pricing for this type of item is

acceptable.

Are the cranes to be controlled via the standard control system, i.e. a sliding pendant system controlled from **Ouestion 13:**

the floor, or are they to be cab operated, or radio controlled?

The cranes shall be controlled from the floor via a standard pendant control system. Answer 13:

The specifications require that the vendor supply the crane runway structural steel support system. Question 14:

However, the installation statement on Attachment 2 states that the contractor is to only install the runway rail and the cranes, i.e. the runway support steel columns, header beams, and runway beams will be installed by others. This infers that these items are being installed by others (shipyard personnel?) Is this is the case?

Yes. The intent is to have commercial shippard personnel or government personnel provide non-specialized Answer 14:

labor (welders, shipfitters, riggers, crane operators, electricians) to install the crane per the manufacturer's

instructions.

If the shipyard personnel are installing the runway structure steel, will they also install the gear rack required **Question 15:**

to move the crane back and forth?

The shipyard or government personnel can do the basic work of mounting the gear rack, but the Answer 15:

manufacturer will need to verify that it is mounted and aligned correctly.

Will the contractor have use of the shipyard cranes/operator for use in installing the crane rail and the Question 16:

overhead cranes referenced in Attachment #2?

Answer 16: Yes the crane resources of the shipyard will be available.

Reference Procurement Specification, Page 5 of 8, Items 14 and 19: Are "Top Truss" and "Cross Tie-Question 17:

Beam" the same thing?

Answer 17: "Top Truss" and "Cross Tie-Beams" are the same thing.

Does the crane (headroom roughly 8') and the Top Truss (several feet deep depending on loadings) have to **Question 18:**

fit into the 29'-6" height limit?

Yes, the height of 29'-6" is fixed and shall not be exceeded. Answer 18:

Is the crane support structure to support all the horizontal loads of the Deckhouse? If so, can the Navy **Question 19:**

provide the lateral and horizontal forces from the Deckhouse, including those from barge roll and pitch

accelerations?

The Longitudinal and Transverse accelerations are provided as the answer to Question 20 (below). The dead Answer 19:

loads for the deckhouse top (35 lb/sz ft) and the deckhouse sides (18lb/sq ft) are given in the answer to

Question 24.

Can the Navy provide pitch and roll accelerations at the bridge crane hoist/trolley elevation? In addition to **Question 20:**

gravity loads at 45 degree roll and 15 degree pitch, there will be sea motion acceleration that are dependent

on barge hull properties and roll and pitch time periods.

Fore/Aft Acceleration for the bridge crane: Answer 20:

1.25 g's Transverse Acceleration for the bridge crane:

1.66 g's Vertical Acceleration for the bridge crane:

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Are all horizontal loads to be carred to the deck by the crane support columns only (with a moment Question 21:

connection to the barge structure)? Or will the Deckhouse roof be designed as a diaphragm that can carry all horizontal loads to perimeter walls, such that perimeter wall bracing between columns and at future end

walls can carry the horizontal loads at the barge deck?

The future deckhouse will eventually become the diaphragm. However, the deckhouse will not exist for a Answer 21:

year or two. During the one or two years when the deckhouse doesn't exist, the crane will have to deal with

the load by itself.

In the longitudinal direction, can bracing be provided btween the columns? Should bracing be provided at Question 22:

each end of the crane support structure for future lateral loads on the Deckhouse, or is the Deckhouse end

wall bracing to be part of the future deckhouse design?

Yes, the bracing can be provided between columns, which will be replaced by the future deckhouse Answer 22:

structure. Bracing shall not be considered for the aft end of the crane. It shall stand free laterally.

Question 23: Reference Procurement Specification, Page 5 of 8 and 6 of 8, Item 20: Can the actual area (square feet) that

is subject to the 1000 psf wave slap be better defined? If this applies to the whole future end wall (30' x 50'), the resulting load of 1,500,000 pounts seem pretty large.

The forward wave slap of 1000 psf will not be anticipated by the whole surface of 30' x 50'. The "green Answer 23:

sea" effect of 1000 psf is for the lowest 10' of the deckhouse, above that it drops to 500 psf the rest of the

height.

Reference Procurement Specification, Page 5 of 8 and 6 of 8, Items 19 and 20: The loading criteria for the Question 24: crane support structure needs to be better defined. Is the 107.5 psf on the Deckhouse roof load over the

entire area of the crane runway? Where is the 30,000 pound generator to be located, where is the load to be applied? Is the Dead Load of the overhead structure 20 psf, in paragraph 19 from or in addition to the 35 psf

Deckhouse top mentioned in paragraph 20? Is the roof hatch weight (33 psf) in addition to the 20 psf

(paragraph 19), in addition to the 35 psf (paragraph 20)? Items 19 and 20 have an error. The dead load of the top shall be the greater number, 35 psf, as stated in item Answer 24:

20. The 20 psf roof requirement, stated in item 19 is both rundant and incorrect. (See revised specification). Our intent is to weld the future deckhouse roof top to the overhead cross tie-beam. Therefore, the overhead cross-tie beam will be subjected to the 107.5 psf live-loading through out. The generator(s) have not yet been determined. However, their general location is to be on the port side of the deckhouse top, preferable aft Frame 10. This will narrow down the load of the generator(s) to 1 quadrant of the deckhouse top. The size of the unit provided in item 19 are approximate sizes of (2) of 500 kW generators, continuous duty to provide offerors an idea of the load to use for estimating purposes. The roof hatch is 15' x 30' with

approximate weight of 15,000# (33.3 psf) which is also an estimate.

Confirm the requirement of a main hoist speed of 25 feet per minute (minimum). Also please provide the **Question 25:**

required method of speed control (single speed, two spped, or variable speed).

See specification revision to "General Requirements" Paragraph 5. Speeds. Answer 25:

Question 26: Confirm the requirement of an auxiliary hoist speed of 6 feet per minute with a load, and 35 feet per minute

unloaded. Provide the required method of speed control (single speed, two speed, or variable speed).

See specification revision to "General Requirements" Paragraph 5. Speeds. Answer 26:

For the bridge and trolley, provide the required method of speed control (single speed, two speed, or variable Question 27:

See specification revision to "General Requirements" Paragraph 5. Speeds. Please Answer 27:

Question 28: Where is the crane disconnect located?

The crane disconnect should be located at the Starboard Aft corner. Answer 28:

The crane supplier will provide power from the disconnect to the crane. Who will bring the power to the Question 29:

crane disconnect?

The government will provide power to the crane disconnect. Answer 29:

Page 5 of 8, paragraph 19. Are the additional loads for the structure to be considered to withstand the **Question 30:**

motion of a max. 45 degree roll and 15 degree pitch plus wind load?

Yes. The generators must be included when evaluating the dynamic loads and wind loads. Note that the Answer 30:

dead load of 20 psf given in item 19 is an error. The correct dead load of 35 psf is given in item 20.

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Question 31:

Answer 31:

Page 5 of 8, paragraph 20. Advise the square footage of all sides of the deckhouse. Starboard side: 2400 Sq. Ft. Port side: 2400 Sq. Ft. Forward side: 1500 Sq. Ft. Aft Side: 1500 Sq. Ft.

Question 32:

Is there a requirement for travel limit switches?

Answer 32:

Travel Limit Switches on the bridges and trolleys are not required.

Question 33:

Has this crane and application been produced previously? This crane has not been produced before.

Answer 33:

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Following is the replacement for "Supplies or Services and Price/Costs":

SUPPLIES OR SERVICES AND PRICE/COSTS

ITEM NO. 0001	SCHEDULE OF SUPPLIES/SERVICES Double Bridge Crane System with Main and Auxiliary Hoists and Supporting Structure in accordance with NAVSEA Drawing IX 536-855- 7543693B, Attachment 1. Basic design submittal required prior to product fabrication. Design submittal to include assembly drawing(s) and installation procedure(s). Delivery of design submittal to be within 15 days from date of contract award. The Government review and approval timeframe will be two weeks from the date the design submittal is received by the Government. Production phase to consist of fabrication, delivery and final documentation. Installation and testing are not included as part of this requirement.	QTY 1	UI GP	UNIT PRICE \$	AMOUNT \$
0002	Option Item for technical assistance during installation and initial operation of the bridge crane and technical assistance during test and post-test inspection in accordance with Statement of Work: Bridge Crane Installation and Testing on IX 536, Attachment 2, paragraphs 1 and 2. Contractor to be onsite from at least one day prior to installation and throughout installation and testing. It is anticipated that it will take one to two weeks to assemble and test the crane. The crane will be assembled, installed, and tested at a shipyard in the Puget Sound Region.	1	GP	\$	\$
0003	Option Item. Provide a Bridge Crane System per NAVSEA DG IX 536-855-7543693A, except with a single bridge, trolley, and hoist assembly per IX 536, Attachment 2, Option Items paragraph 1.	1	GP	\$	\$
0004	Option Item. Second bridge assembly in support of CLIN 0003.			\$	\$
0005	Option Item. Provide labor, materials, and facilities to install, assemble, test, certify, clean and repair coatings during installation in the Puget Sound Region per IX 536, Attachment 2, Option Items paragraph 2.	1	GP	\$	\$
	Total Aggregate Not-To-Exceed Amount				\$

It should be noted that the option items are to allow for alternate pricing and that not all CLINs will be awarded.

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The following revisions are hereby incorporated to NAVSEA Dwg IX 536-855-7543693B.

The "GENERAL REQUIREMENTS" element 5 is amended to read:

5. Speeds:

Each bridge shall have a variable speed controller with a maximum speed of 80 feet per minute.

Each Trolley shall have a variable speed controller with a maximum speed of 40 feet per minute.

Each auxiliary hoist shall have a variable speed controller, with a maximum speed of 35 feet per minute with full load.

Each main hoist shall have a variable speed controller, with a maximum speed of 30 feet per minute with full load.

The "STRUCTURAL REQUIREMENTS" element 19, the last sentence is amended to read:

Dead load of the overhead structure shall be taken as <u>35</u> psf.

- CLINs 0003, 0004, and 0005 are added to paragraph a. "Exercise of Option (Increased Quantities)".
- The Time of Delivery clause 52.211-8 is revised as follows:

QUANTITY 1 GP	REQUIRED DELIVERY SCHEDULE Delivery of Design Submittal within 15 days after date of contract with delivery of Double Bridge Crane System within 120 days after approval of Design Submittal
1 GP	CLIN 0002 is anticipated to be required in the spring of 2004 and will require a timeframe of one to two weeks
1 GP	If awarded in lieu of CLIN 0001, delivery of Design Submittal within 15 days after date of contract with delivery of Single Bridge Crane System within 120 days after approval of Design Submittal
1 GP	Design Submittal within 20 days after exercise of option. Delivery of system within 120 days of approval of Design Submittal
1 GP	If awarded in lieu of CLIN 0002, CLIN 0005 is anticipated to be required in the spring of 2004 and will require a timeframe of one to two weeks
QUANTITY	OFFEROR'S PROPOSED DELIVERY SCHEDULE
	Within days after date of contract
	1 GP 1 GP 1 GP 1 GP

- Attachment 2 (copy attached hereto) has been revised to include information regarding the Option Items.
- Drawing reference 2 (NAVSEA IX 536-120-7543729) wihin NAVSEA Drawing IX 536-855-7543693B has been updated to include minor changes. Requests for the revised Drawing Reference 2 may be submitted via E-Mail to klosem@kpt.nuwc.navy.mil.

Statement of Work: Bridge Crane Installation and Testing On IX536

- 1. During installation and initial operation of the bridge crane the manufacturer shall provide:
 - a. On site technical consulting throughout assembly and testing
 - b. All trained labor needed to mount and align the runway rails
 - c. All trained labor needed to install the bridge assemblies and trolleys
- 2. After installation of the bridge crane the government will test it to the requirements of NAVFAC P-307. During and after the test, the manufacturer shall provide:
 - a. On site technical consulting through the test and the post-test inspection.
 - b. Labor and materials to correct any deficiencies found during testing.

Option Items

- 1. Provide a Bridge Crane System per NAVSEA DWG IX 536-855-7543693A, except with a single bridge, trolley, and hoist assembly. The runway, support columns, top truss assembly and crane electrical system shall have sufficient capacity to support two single bridge, trolley, and hoist assemblies, so that a second assembly can be added at a future date.
- 2. Provide labor, materials, and facilities in the Puget Sound Region to:
 - a. Install and assemble the crane on the IX536.
 - b. Test and certify the crane.
 - c. Clean and repair coatings damaged during the crane installation.